COMPARATIVE STUDY OF EFFECTIVENESS OF YOGA NIDRA IN TERMS OF SELECTED PHYSIOLOGICAL AND PSYCHOLOGICAL VARIABLES AMONG SCHOOL TEACHERS

A SHORT SYNOPSIS SUBMITTED BY

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SUBMITTED TO

DEPARTMENT OF YOGIC SCIENCES

LAKSHMIBAI NATIONAL INSTITUTE OF PHYSICAL EDUCATION, GWALIOR

In partial fulfillment of the requirements for the Degree of

DOCTOR OF PHILOSOPHY IN YOGA

2021-2022

Certificate

I hereby declare that the synopsis "**Comparative study of effectiveness of yoga nidra in terms of selected physiological and psychological variables among school teachers**" being submitted in the partial fulfillment of the requirement for the degree of Doctor of Philosophy in Yogic Science under the Department of Yogic Sciences, Lakshmibai National Institute of Physical Education Gwalior - 474002 during the academic year 2021-2022.

It is a bonafide record of original work carried out under the supervision of **Dr. Mukesh Narwariya** (Assistant Professor, LNIPE, Gwalior, M.P.) and co-supervision of **Dr. Aseem Jayanti Devi** (Assistant Professor, Maharshi Dayanand Saraswati University Ajmer, Rajasthan) and has not been submitted in full or part to any other university or institute for a degree or diploma.

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Abstract

The teaching profession is one of the most impactful and respectful careers. But with great powers come great responsibility and various challenges. One of the major problems reported among the school teachers is occupational stress, which results in intense and distressing experience. This study aims to reflect the comparative study of effectiveness of yoga nidra in terms of various physiological and psychological variables among school teachers.

To examine this study 120 school teachers will be involved. School teachers are further classified among private and government sectors. Among them two groups will be there, experimental and control group. Interventional program that is yoga nidra will be given to experimental group for a time period of 12 weeks, with 5 days of intervention in a week.

The study targets the current situation of private and government school teachers which will reflect their vulnerabilities that makes it further treatable with various yogic practices. Effect of yoga nidra will be seen among the school teachers that will reflect the further outcomes.

Keywords: school teachers, yoga nidra

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CHAPTER-1
INTRODUCTION

The teaching profession has traditionally been regarded as low-stress occupation, but during the Past two decades, the situation has undergone a somersault (Olivier Venter, 2003). Teaching is becoming a more challenging profession worldwide. Surveys conducted worldwide revealed widespread concern about the effects of stress on teachers 'sense of well-being and their willingness to stay in the profession. Cotton and Hart (2003), had reported that Occupational Stress is a growing problem worldwide, which results in substantial losses both to employees and organizations.

Further, Stress related to a job or occupation is called occupational stress, and stress is a universal phenomenon, an excess of which results in an intense and distressing experience. Stress is defined as "a state of psychological and physiological imbalance resulting from between situational demand and the individual's ability and motivation to meet those needs" (Hans Seyle, 1956). Education is a process, by which the personality of the child is developed, and this is possible by the interaction between the child and his environment, and teachers are the most powerful environment for child development. Thus, the role of a teacher does not limit itself to imparting knowledge alone, but in broadens the national outlook, enhances a sense of efficacy and competency among the future citizens, and prepares individuals for the right type of profession. Effects of stress among school teachers: Stress among teachers impedes teacher's performance in teaching, it is assumed that mild stress can even enhance performance but high level of stress can create physical (Schultz &Schultz, 2002), psychological burnout (Fisher, M.H., 2011) and behavioral problems among teachers (Mead 2000). For centuries, teaching has been characterized as a profession that is "emotionally taxing and potentially frustrating" (Lambert, O'Donnell, Kusherman, & McCarthy, 2006). The rate at which teachers leave the profession is significantly higher than the departure rate in other professions (Minarik, Thornton, & Perrault, 2003). Reasons for stress among school teachers: Many researchers have showed that the teachers have experienced stress under various circumstances, such as planning lessons, managing classroom's discipline (Chaplain, 2008; Kyriacou & Kuna, 2007), conducting and monitoring extracurricular activities(Brown, 2005), classroom demands and resources(McCarthy et al., 2009),handling difficult students and pressure of student's parents (Geving, 2007).Heavy workload, time pressure, education reforms, external school review, pursuing further

education, and managing students 'behavior and learning were the most frequently reported sources of work stress (Chan, Chen &Chong, 2010). Other cited reasons for teacher stress are lack of administrative support (Blase, Blase, & Du, 2008; Lambert et al., 2006) and the excessive number of tasks that are required of new teachers who have not acquired successful task-management skills (Brown, 2005)

Nevertheless, Yoga–nidra is probably the best-known technique to induce complete physical and emotional relaxation. Yoga nidra is a state of consciousness which is neither sleep nor awake, nor is it concentration or hypnotism. It can be defined as an altered state of consciousness. Techniques of Yoga-Nidra have preventive, promotive, and creative values. It prevents stress and stress-related disorders by inducing deep physical, emotional, and mental relaxation by training the mind to remain calm and quiet. It is a state of conscious deep sleep. During the practice of yoga nidra, one appears to be asleep, but the consciousness is functioning at the deeper level of awareness. It is sleep with a trace of deep awareness. It is a state of mind between wakefulness and sleep. Normally, when we sleep, we lose track of ourselves and cannot utilize the capacity of our minds. Yoga nidra enables the person to be conscious in this state and nurture the seed of great will power, inspire the higher self, and enjoy the vitality of life. Earlier studies showed a positive impact of yoga nidra on anxiety, stress, and depression (Kumar, 2008; Vorkapic, Pinhero, Marchioro & Santana, 2018). Further, yoga nidra was effective in maintaining physical and psychological health in middle-aged individuals (Tripathi, 2018).

STATEMENT OF THE PROBLEM:

It is stated as the comparative study of the effectiveness of yoga nidra on selected psychological and physiological variables among private and government school teachers.

OBJECTIVE OF THE STUDY

- To characterize the level of Physiological Variables (Heart rate Variability, Blood pressure, FVC) among the private and government school teachers of both the yoga nidra group and the control group.
- To characterize the level of psychological variables (Occupational stress, Burnout, and Role conflict) among the private and government school teachers of both the yoga nidra group and the control group.

- To compare pretest-posttest mean scores of Physiological Variables (Heart rate Variability, Blood pressure, FVC) among the private and government school teachers of both the yoga nidra group and the control group.
- To compare pretest-posttest mean scores of psychological variables (Occupational stress, Burnout and Role conflict) among the private and government school teachers of both the yoga nidra group and the control group.
- To compare adjusted mean scores of Physiological Variables (Heart rate Variability, Blood pressure, FVC) among the private and government school teachers of both the yoga nidra group and the control group, by considering their pre-Physiological Variables (Heart rate Variability, Blood pressure, FVC) as a covariate.
- To compare adjusted mean scores of psychological variables (Occupational stress, Burnout, and Role conflict) among the private and government school teachers of both the yoga nidra group and the control group, by considering their pre psychological variables (Occupational stress, Burnout, and Role conflict) as a covariate.

HYPOTHESIS OF THE STUDY

1. There will be no significant difference between pretest and posttest mean scores of Physiological Variables (Heart rate Variability, Blood pressure, FVC) among the private and government school teachers of both the yoga nidra group and the control group.
2. There will be no significant difference between pretest and posttest mean scores of psychological variables (Occupational stress, Burnout, and Role conflict) among the private and government school teachers of both the yoga nidra group and control group.
3. There will be no significant difference between adjusted mean scores of Physiological Variables (Heart rate Variability, Blood pressure, FVC) among the private and government school teachers of both yoga nidra group and control group, by considering their pre–Physiological Variables (Heart rate Variability, Blood pressure, FVC) as a covariate.
4. There will be no significant difference between adjusted mean scores of psychological variables (Occupational stress, Burnout, and Role conflict) among the private and government school teachers of both yoga nidra group and control group, by considering their pre psychological variables (Occupational stress, Burnout and Role conflict)as a covariate.

DELIMITATIONS

- The study will be restricted to age groups from 35 to 45 years of private and government school teachers of Gwalior.
- The study will be delimited to 120 school teachers of Gwalior.
- The study will be delimited to both male and female school teachers.
- The study will be delimited for 12 weeks, with 5days of intervention per week.
- The study will be further delimited into the following psychological and physiological variables.
- Psychological variables: Occupational stress, Burnout, Role conflict.
- Physiological variables: Heart rate variability, Blood pressure, and FVC.

SIGNIFICANCE OF THE STUDY

- The significance of the present study is to examine the effectiveness of yoga nidra among private and government school teachers.
- The significance of the present study is going to help in tackling the Occupational stress, Role conflict, and Burnout among private and government school teachers through yoga nidra.
- The significance of the present study is going to help in knowing the effect of yoga nidra on Heart rate variability, Blood pressure, and FVC.
- The significance of the present study is going to help in knowing the current situation of private and government school teachers on the basis of selected psychological and physiological variables.
- The significance of the present study is to determine the effectiveness of yoga nidra among both the male and female school teachers.

CHAPTER-2
REVIEW OF RELATED LITERATURE

Camilla Ferreira. (2018) examines the Impact of Yoga Nidra and Seated Meditation on the Mental Health of College Professors. And the study showed the effectiveness of Yoga Nidra and seated meditation in reducing anxiety and stress levels of college professors when compared to the control group. However, there was a tendency toward a greater effectiveness of the Yoga Nidra intervention regarding anxiety. Yoga Nidra is easy to perform, does not require a seated posture and concentration, and seems to positively impact psychological variables, such as anxiety and depression. Therefore, it might represent a therapeutic technique with preventive, promotive, and curative value. However, more studies, with different groups of all ages and occupations, are necessary to better elucidate the mechanisms through which Yoga Nidra works.

H R. Nagendra (2010) examines the Impact of the Adoption of the Yoga Way of Life on the Reduction of Job Burnout of Managers. The paired t-test analysis of the pre- and post-experiment data for the Yoga group showed a significant reduction of job burnout ($p=0.000$). On the other hand, in the physical exercise group, the job burnout level went up after the experiment. Furthermore, the difference was statistically significant at $p=0.008$. One plausible explanation is that the schedule of attending the practical and theory classes of physical exercise could have put further pressure on the already tight schedule of the managers. The burnout level must therefore have gone up temporarily post-experiment.

Kumar. (2008) reported the effectiveness of Yoga Nidra incurring psychological disorders like anxiety, hostility, insomnia, etc., and psychosomatic diseases like Asthma, coronary heart diseases, cancer, hypertension, etc. In the study, it has been found that the practice of Yoga Nidra decreases the stress and anxiety level of the students of higher classes in Dev Sanskrit Vishwavidyalaya, Haridwar.

Anita Sharma. (2020) examined the effect of yoga training intervention on the Kendriya Vidhyalaya principals on their role conflict, role overload, and role ambiguity. The principals showed a significant decrease in role overload ($P< 0.001$), role ambiguity ($P< 0.01$), role conflict ($P< 0.05$), under participation ($P< 0.001$), powerlessness ($P< 0.001$), intrinsic impoverishment ($P< 0.01$), law status ($P< 0.001$), and overall occupational stress ($P< 0.001$) after 7 days of yoga training intervention.

Ruchir ahuja and VS gusain. (2021) examine the impact of transcendental meditation on the job involvement of lower management staff of a metro city. After two months of their respective treatments, the subjects of the experimental group differed from the control group on both the dimensions of Job Involvement, viz., Identification with the Job (P<0.0005) and Job Centricity (P<0.0005). Further, in comparison to their pre-experimental stage, subjects of the experimental group improved significantly on the same two dimensions of their Job Involvement, viz., Identification with the Job(p<0.005),Job Centricity(P<0.005), at the post-experiment stage(after two months of T.M. practice)

Saraswati Devi and saraswati kala. (2015) examines the Role of Yoga-nidra and Shirodharaon Hypertensive Patients. The study was conducted on 32 hypertensive patients aged 30-60 years, who were randomly selected from Polyclinic, Dev Sanskriti Vishwavidyalaya, Gayatrikunj, Haridwar, through the method of accidental sampling. In this study"pre-post single-group design"was used, and a t-test was used for statistical analysis. There was a significant reduction in mean values of systolic blood pressure and diastolic blood pressure. From the present study, it was observed that a significant reduction in the systolic blood pressure, diastolic blood pressure occurs in subjects practicing yoga nidra and shirodhara (p<0.001).result: The finding reveals that it significantly reduced the level of systolic and diastolic blood pressure of the hypertensive patients.

Rani et al. (2013) examined the effects of Yoga Nidra on stress levels among B.Sc Nursing first year students at the academic level, Performance interface students' preparation, concentration, attention and memory, etc. As a result, it has been found that the level of stress after the administration of Yoga Nidra was decreased immoderate and low levels of stress, but no effect of Yoga Nidra has been found on students having high stress levels.

Sharma etal. (2005) observed that the practice of Yoga brings harmony in the psycho-physiology of the practitioners, Deuskar et. al. (2006) found a significant change in the Performance of archers due to the practice of Yoga Nidra. The result shows that Yoga Nidra positively decreases the stress level of the male and female subjects.

CHAPTER 3
METHODOLOGY AND PROCEDURE

Selection of the subjects

Subjects for the study will be selected from both the private and government schools of Gwalior, both male and female. Sample size will be {n=120}, which will be further divided into two groups: experimental and control groups.

GROUP	SAMPLE SIZE	TRAINING
EXPERIMENTAL	35	YOGA NIDRA
CONTROL	25	NO INTERVENTION GIVEN

Criteria of measurements

Psychological variables:

Occupational stress– It will be measured by the teacher's occupational stress scale by M. Sharma and S. Kaur.

Burnout- It will be measured by the teacher's burnout scale by Madhu Gupta and Surekha Rani.

Role conflict- It will be measured by the teacher's role conflict scale by Madhu Gupta and Indu Jain.

Physiological variables:

Heart rate variability- It will be measured by an ECG device.

Blood pressure-It will be measured by a sphygmomanometer.

FVC-It will be measured by a spirometer.

Research design

VARIABLES	Pre test	Intervention	Post test
Occupational stress	A1	X	A2
Burnout	B1	X	B2
Role conflict	C1	X	C2
Heart rate variability	D1	X	D2
Blood pressure	E1	X	E2
FVC	F1	X	F2

Administration of the test:

For the study, yoga Nidra will be administered to the experimental group, and no training will be given to the control group. They will act as a passive control group. 5 days a week interventional programme will be given.

The training protocol of 12 weeks will be:

Main practice	1stweek	2ndweek	3rd week	4th week	5th week	6th week	7th week	8th week	9th week	10th week	11th week	12th week
Opening prayer	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min
Yoga nidra	20min	20 min	20 min	20 min	25 min	25 min	25 min	25 min	30 min	30 min	30 min	30 min
Closing Prayer	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min	1 min

Statistical Technique

- Descriptive statistics will be used to characterize the level of selected psychological variables (Occupational stress, Burnout, Role conflict) and physiological variables (Heart rate variability, Blood pressure, FCV) of private school teachers of Gwalior.
- Dependent T-test will be used to compare the mean scores of selected psychological variables (Occupational stress, Burnout, Role conflict) and physiological variables (Heart rate variability, Blood pressure, FCV) of private school teachers of Gwalior at pre-test and post-test stages of the experimental group and control group.
- One-way Ancova will be used to compare adjusted mean scores of selected psychological variables (Occupational stress, Burnout, Role conflict) and physiological variables (Heart rate variability, Blood pressure, FCV) of Experimental and control group of private school teachers of Gwalior by considering the pre- score of psychological variables and physiological variables as covariate.
- Level of significance set to 0.05

Expected Outcome

The study aims to determine the effectiveness of yoga nidra on the various physiological and psychological variables among the school teachers. It is expected that the yoga nidra will results in the overall improvements along all the variables tested. The findings will lead to determine the various health parameters of school teachers in the current scenario and will able to resolve their challenges that opens the gate for the future study with diverse interventional programs.

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